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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,434	09/05/2003	Hitoshi Yamamoto	2271/70977	8466

7590 09/16/2004  
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EXAMINER
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WILLIAMS, ALEXANDER O

ART UNIT	PAPER NUMBER
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2826

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/656,434

Applicant(s)

YAMAMOTO, HITOSHI

Examiner

Alexander O Williams

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 3-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2826

Serial Number: 10/656434 Attorney's Docket #: 2271/70977

Filing Date: 9/5/2003; claimed foreign priority to 9/6/2002

Applicant: Yamamoto

Examiner: Alexander Williams

Applicant's election of Group I (claims 1 and 2), filed 7/15/2004, has been acknowledged.

Applicant's arguments are not found to be persuasive. In the examination of claims Group I (claims 1 and 2) the Examiner would be interested in searching for the final structure of the semiconductor device claimed. For example, in the examination of Group II (claims 5 and 6) the Examiner would be interested in the step claimed to achieve the semiconductor device claimed. Therefore, the two Groups would require a search in different art units and class.

Each of the Groups have searches in different art units and classes that would unduly burden the Examiner to evaluate all claims on their merit at the full time. This is not found persuasive because of the reasons detailed in the last Office action.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 3-9 drawn to an invention non-elected with traverse. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (see 37 CFR § 1.144 & MPEP § 821.01).

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2826

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being anticipated by Sawaya (U.S. Patent # 5,245,215).

1. Sawaya (figures 1A to 15B) specifically figures 1A and 1B show a semiconductor device which integrates a plurality of semiconductor chips **12-1,12-2** into a single package, comprising: a first semiconductor chip **12-2** which includes a plurality of first bonding pads **17** outputting first signals having a first level; and a second semiconductor chip **12-1** which includes a plurality of second bonding pads **17** electrically coupled to a part of the plurality of first bonding pads to receive the first signals having the first level from the first semiconductor chip through the part of the plurality of first bonding pads and a plurality of third bonding pads **17** which converts the first signals received through the plurality of second bonding pad into second signals having a second level different from the first level and outputs the second signals through the plurality of third bonding pads.
2. The semiconductor device as defined in Claim 1, Sawaya show wherein the second level is greater than the first level.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/685,723,666,777,686,728,676,678,787,784,786,696, 698,691,690	9/14/04
Other Documentation: foreign patents and literature in 257/685,723,666,777,686,728,676,678,787,784,786,696, 698,691,690	9/14/04
Electronic data base(s): U.S. Patents EAST	9/14/04

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AOW  
9/15/04

A handwritten signature in black ink, appearing to read 'A. Williams', with a stylized flourish at the end.

Primary Patent Examiner  
Alexander O. Williams